FMCSA GUIDELINES FOR

Portable Computer Systems

Hardware and Software Issues

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Synopsis -- This document provides guidelines for computer software & hardware procurement for use with various specialized motor carrier safety field information systems. These systems allow Federal safety specialists, inspectors and State police officers to query national Motor Carrier Safety information sources, conduct North American standard driver/vehicle inspections, motor carrier Compliance Reviews, and prepare enforcement cases. These guidelines are based on extensive experience and testing done by States and the FMCSA Field Systems Group (FSG).

FMCSA Supported Custom Field software

The following software are routinely used in motor carrier safety law enforcement:

1. **ASPEN:** This is the driver/vehicle inspection software used by most States and the FMCSA. ASPEN runs on laptops and is used to collect inspection details and print the inspection report. It includes communication features to electronically transfer inspections to SAFER & SAFETYNET.

2. **CDLIS Access:** This is software for retrieving driver status reports from the Commercial Driver License Information System (CDLIS). It is coupled to ASPEN and CAPRI but can be operated as stand alone software.

3. **PIQ (Past Inspection Query):** PIQ accesses a national database of recent inspection reports (those done within the last 45 days), and retrieves copies and summaries. It allows checking for unrepaired defects and driver hours problems.

4. **ISS (Inspection Selection System):** ISS is the primary tool used on the roadside to screen motor carrier vehicles and determine the usefulness of conducting an inspection. ISS returns the carrier snapshot which includes many critical safety performance indicators. ISS is linked to ASPEN to auto-populate name and address data fields and initiate the inspection. ISS uses a local database which is refreshed weekly via SAFER. It can also operate as an online query tool.

5. **CAPRI**: This software is used for preparing standard Compliance Reviews as well as specialized cargo tank facility reviews, and HM shipper reviews. CAPRI includes worksheets for collecting (1) hours of service data, (2) driver qualification data, and (3) drug & alcohol compliance data. It also creates the preliminary carrier safety fitness rating and various reports to motor carriers.

6. **CaseRite:** Used in conjunction with CAPRI or ASPEN, CaseRite allows creation of legal enforcement cases for Federal prosecution of FMCSR & FHMR violations. The current version of CaseRite is optimized for Federal prosecutions.

7. **UFA (Uniform Fine Assessment):** This software allows calculation of a uniform and reasonable fine amount based on the nature of the violations and the various criteria set forth in the FMCSR. UFA is optimized for Federal fine structures and is used with CAPRI and CaseRite.

8. **MCREGIS:** A specialized text retrieval system, MCREGIS allows instant access to all Federal Safety regulations (FMCSR & FHMR) as well as all official interpretations of these regulations, various operations manuals, rosters and specialized data tables. States may obtain MCREGIS from J.J. Keller & Associates, Neenah, Wisconsin 54957. 800 558-5011, www.jjkeller.com.

9. **PC*MILER:** A highway routing and mileage calculation package, PCMiler is commercial software from ALK Associates. It has been the standard used by FMCSA and most States for many years. Special pricing is available for State users. Contact: ALK Associates, 1000 Herrontown Rd., Princeton, NJ 08540, 800 377-6453 or 609 683-0220. www.alk.com.

Related Information Systems:

1. **AVALANCHE --** is a communications handler and preprocessor for inbound vehicle inspection reports coming from ASPEN. AVALANCHE was released in 1996 and will be replaced by SAFETYNET-2000 by mid 2000.

2. **BLIZZARD-2** – is a communications handler for transfer of inspection data between office systems and SAFER. Blizzard functions include a local bulletin board system and a robust auto-poller to retrieve inspection data from SAFER.

3. **SAFETYNET --** is a major database management system that allows entry and access of data from driver/vehicle inspections, crashes, compliance reviews, assignments, complaints, enforcement cases, etc. It is operated at State safety agencies & Federal divisions and includes links to SAFER, MCMIS, etc. SAFETYNET-2000 is an Oracle based client/server system.

4. **MCMIS** -- (Motor Carrier Management Information System) is the national data warehouse & information system that captures State level data from SAFETYNET and other sources. MCMIS currently runs on a mainframe system. New MCMIS, scheduled for 2001 startup will run on Oracle servers with web front end access.

5. **SAFER** – is the FMCSA communications nexus with links to various databases. It handles user queries, database refreshes, and inbound data transfers. SAFER consists of a web site, store and forward mailbox system, secondary databases, and communication links.

6. **CVIEW** – is a state optimized version of SAFER which can be deployed in States to handle all SAFER functions and allow access to State legacy information systems. CVIEW systems can communicate with the national SAFER system.

Software Availability

Much of the above software is available free to State enforcement agencies from the FMCSA Technical Support Hotline (617) 374-5090. The continuing development and support of these systems is a service of the Federal Motor Carrier Safety Administration.

FMCSA custom field applications described in this document are mostly written in the Delphi programming language and use the *Borland Database Engine (BDE)* which is distributed with the software. The end user needs no additional run time license or external software to run these programs.

All field systems are transitioning from 16-bit to 32-bit software as shown by the chart below. At present, however, both operate together and need both the 16-bit and 32-bit version of the BDE.

RDBMS Licensing Issues -- Most systems described above use commercial relational database management system engines to handle data access and storage. The FMCSA has obtained all site licenses needed so States can operate the systems without becoming involved in licensing issues. The following RDBS are involved:

INTERBASE SERVER – is used by AVALANCHE to handle storage of driver/vehicle inspection data. The SQL RDMS is distributed with the package. The end-user needs no additional run time license or external software to run AVALANCHE. SAFETYNET-2000 will replace this application.

ORACLE 7.x – is used by SAFETYNET-2000 as its primary SQL database engine. FMCSA has obtained an Oracle site license for operating SAFETYNET in all States. The license is limited to just SAFETYNET, so States wishing to use Oracle outside of this application will need to obtain their own license.

PARADOX – is the RDBS used in most roadside system clients (e.g. ASPEN, ISS, PIQ, CaseRite, etc.). It is distributed with the software and no additional run time license is needed. PARADOX is a very robust, small footprint system which works well on remote clients.

dBASE – is the older legacy RDBS still used in some field applications such as CAPRI, SAFEYTNET-10, etc. Plans are to phase out dBASE. The dBASE engine is distributed with the applications and no additional run time license is needed by end users.

Transition from 16 to 32-bit Applications

16-bit Application	Version	32-bit Application	Version	Release Date
–	--	CAPRI	4.1	Feb 00
–	–	UFA	2.1	Feb 00
--	--	MCREGIS	--	Oct 99
–	–	PC*Miler	2000	Oct 99
ISS	1.6	ISS-2	2.0	Feb 00
Blizzard	1.6	Blizzard v2	2.0	Feb 00
CaseRite	2.9	CaseRite III	1.x	Spring 00
ASPEN	1.6	ASPEN-v2	2.x	Summer 00
PIQ	1.6	PIQ-v2	2.x	Summer 00
CDLIS	1.6	CDLIS-v2	2.x	Fall 00
Avalanche	1.6	Now: SAFETYNET-2000	1.x	Summer 00
SAFETYNET-10	10.x	SAFETYNET-2000	1.x	Summer 00

Operating Systems (OS) -- The above field applications are all designed for the Microsoft Windows operating environment. All applications will be 32-bit by the end of 2000 and will operate under either*, Windows95, 98, NT or 2000*. The goal is to have all applications operate under *Windows-2000*, but the time table for this is uncertain. According to Microsoft, any application written for *Windows-NT* will run on *Windows-2000*; but FSG has not yet tested or certified this. At present all Federal laptop systems use *Windows-95.* Our experience is that this is still the most stable platform provided by Microsoft for laptop applications.

Windows-2000, introduced in February 2000, is getting good reviews but will probably will not be retrofitted to many older machines for several reasons. *Windows-2000* is appealing for new procurements, however, because it incorporates important laptop features not available in the old NT-4 without third party patches. These include:

1. Intelligent power management,
2. Easy infrared port data transfers,
3. Auto recognition of new hardware when inserted (plug & play),
4. Easy recognition of USB (Universal Serial Bus) devices

5. Support for DirectX 7.0 (NT-4 stopped at version 3 so many high-end graphical programs do not work with NT-4).

MORE GOOD NEWS: Reports indicate that common glitches in older Windows OS versions seem to be fixed in Windows-2000. Processor performance gains are also being reported. Mostly these come from converting to the NT File System.

THE BAD NEWS: The new OS requires a 266 MHz Pentium II with 64 MB of RAM for even acceptable performance. Higher power machines are recommended. OS cost is also an issue. Upgrades are $150 and new copies are $350. The biggest problem is that Windows-2000 requires all new device drivers which are in short supply for older hardware.

WINDOWS-ME: In February 2000, Microsoft announced that the next generation of *Windows-98*, called *Windows-ME* (previously Millennium) will be optimized for home users and will not support networking. This version is expected to be released in May 2000. It apparently will not be a practical option for our applications.

For States wishing to look into upgrading, system compatibility can be tested prior to install by running: Microsoft *Windows 2000* Product Analyzer. This utility determines whether a system has proper hardware for the upgrade and which software should be disabled or uninstalled. The 2.6 MB utility can be downloaded free from Microsoft at: www.microsoft.com/windows2000/upgrade/compat/ready.asp. Remember, however, that as of this document, *Windows-2000* is not certified to operate FMCSA software.

Computer Hardware Issues

These guidelines & specifications are for new procurements. They do not represent minimum specifications needed to run the software. Instead they are optimized for value & usefulness over the expected 3-4 year life of the machine. A low-end machine may soon become obsolete, while a cutting edge machine may prove excessively expensive.

A. Laptop-Computer Items

1. Laptop computer (see below for detailed specs),
2. Protective case for laptop computer,
3. Communications modem & cable,
4. Power adaptor for car use & battery charging, (optional)
5. Car pedestal bracket for mounting laptop computer, (optional)
6. Port replicator for easy office use of the laptop, (optional)
7. Extra AC adaptor for use with port replicator, (optional)
8. Network interface card for office LAN connection. (optional)

B. Printers & Scanners

1. Portable printer with sheet feeder,
2. Printer cable,
3. Rechargeable printer battery, (optional)
4. power inverter for 12-volt DC to 110-volt AC, (optional)
5. Brackets for mounting in auto or van. (optional)
6. Portable scanner & Power adaptor (optional)

C. Computer equipment for running *Avalanche*.

Size and speed of this computer will depend on inspection volumes. In general the faster the better, particularly for systems operating with over 10,000 stored inspections. Also note that increased processing speed and hard disk capacity are very inexpensive!.

1. Desktop computer, (Pentium II @ 500 MHZ or better)
2. Hard Drive (10 GB or better) -- (min of 100 MB for every 40K records)
3. CD-ROM Drive, 24x or better
4. 64 MB RAM or better
5. 56 KB modem
6. Backup tape system if machine not tied into LAN backup system
7. Data line, single circuit analog phone line (depends on local configuration)
8. LAN connection to SAFETYNET computer (if possible). Otherwise null modem link to SAFETYNET recommended.
9. *Windows95, 98 or NT* Operating System. NOTE: Avalanche is a 16-bit application but will run under Windows-NT.

Special Considerations For Roadside Operations -- ASPEN 1.x was originally designed and optimized to run on pen-computers. The idea was to carry the portable computer around while doing the inspections. Experience in many States has shown, however, that this approach is currently impractical. Most States have now migrated to laptop computers which are operated from within a police car or scale house after the physical inspection is complete. In the law enforcement world, these were historically called **Mobile Data Terminals** (MDT) and served multiple functions in data entry, querying, and data communications. While originally MDT's were highly customized communication devices, they are now conventional laptop computers.

Pencentric Operation – While ASPEN was designed as a pencentric application, the current version also runs well with a convention laptop computer and appropriate pointing device such as mouse, pointing stick, or pad. ASPEN contains a soft-switch which can disable the pop-up keyboard and numeric pad in favor of the actual hardware devices. The next generation ASPEN (version 2) will further de-emphasize pen use but will still be useable on Pen-computers.

Some States still favor pen use in screen navigation. In fact many laptops can be retrofitted with a touch sensitive screen which allows pen-computer type input by touching the screen with stylus or finger. For details on retrofitting laptops for touch screen operation, contact:

Performance Concepts, inc. 800-969-9550
7855 Division Dr., Mentor, OH 44060 www.pcioh.com

Touch screens are routinely fitted on many laptops at per unit costs of $425 - $525. Some vendors still offer touch screens as a standard option.

Costs for Budget Calculations
Hardware & Telecommunication

Item	Low Cost	High Cost
Laptop workstation	$2,500	$3,500
Laptop printer	$250	$350
Portable scanner	$200	$250
Port replicator	$200	$450
Laptop case, cables & supplies	$80	$200
Avalanche desktop computer	$800	$1100
Wireless modem equipment for laptop	$250	$500
TELECOMMUNICATIONS SERVICES		
Circuit switched phone connection for Avalanche	$15/mo	$35/mo
CDPD wireless connection (when available)	$15/mo	$50/mo
Cellular digital wireless connection	$15/mo	$40/mo
Internet Service Provider (ISP) for VPN connection	$15/mo	$60/mo

Communication Strategies

Field users have growing communications needs for both data transfers and queries. Roadside users need to link to SAFER and/or to State services. Investigators need remote access as well. This can be by dial-up wired connection, or cellular wireless connection. Options include:

A. Dial-up switched circuit link (POTS)
B. Dial-up link to AAMVANET
C. Dial-up link to FTS-2001
D. Dial-up link to private Internet Service Provider (ISP)
E. Wired link to wide area network (such as at inspection locations)
F. Wireless CDPD service such as with Bell-Atlantic
G. MOBILEX private wireless network
H. Wireless analog cellular link
I. Wireless digital cellular link
J. Private state analog radio network
K. Private state digital radio network
L. Wireless Ethernet (802.11) link to local network server

Communications decisions can be expensive and have far ranging implementations. States should bring in appropriate IT expertise to facilitate these decisions.

General Laptop Computer Specifications

The following is a list of critical features that make up the specifications. Since laptop technology is steadily evolving, these specifications can change even if the minimum requirements needed to run the current software are unchanged. The reason for this is that price points for various sub-components in laptops change as production volumes rise and fall. No one can complain about getting faster/better/more features for less money and this situation is the norm in laptops. Be sure, however, that your copy of this document is the most recent available as specs listed below may change.

As a rule of thumb, procure the best laptops the budget will afford. Today's top-end machines become equivalent to mid-level machines in about 6-8 months. Plan on a life cycle of 3-4 years. The following is a summary of the specifications and comments on various features and where lesser specs are acceptable.

MICROPROCESSOR -- Intel Pentium-III @ 450 MHz or faster. Lower end processors are possible, but there are significant power management advantages to the Pentium III for new procurements.

DISPLAY SCREEN – An 13.3" (diagonal) active (TFT) Matrix color with 128-bit graphic accelerator chip supporting XGA resolution of 65K colors at 1024x768 pixels. 4-8 MB or better video RAM is needed.

PC-CARD SLOTS -- Two type II or one type III double stacked. Note: Some wireless modems require double stacking with a interconnect between the two cards.

HARD DISK SIZE -- 6-12 GB easily removable drive. NOTE: future imaging applications will require dramatically increased hard drive capacity. The standard

FMCSA configurations with ASPEN, the complete ISS database, PCMILER, MCREGIS, CAPRI and other modules require about 500 MB total. The *Windows98* OS requires 60 MB, and *Microsoft Office-2000* suite requires 217 MB.

POWER SYSTEM -- Laptop must be capable of battery and 110 volt, AC operation. Battery power should be based on removable lithium-ion rechargeable batteries. Intelligent power management system must prevent overcharging and allow multiple power use modes. Systems must be capable of at least 2.5 hours operation with continuous hard disk and display screen operation.

FORM FACTOR & WEIGHT -- The common notebook size is 10 x 12 x 1-2 inches thick. Notebook computers should not exceed 8 pounds. The current trend is toward thinner machines weighing about 4 pounds. Sub-notebooks with lesser overall dimensions have smaller keyboards. This has proved a problem for many users because small keyboards are harder to use. There is a controversy about 2 or 3 spindle machines where a "spindle" means a rotating media device, such as hard drive, diskette drive, and CD-ROM. Some manufactures have opted for 2-spindle machines to save weight. The third device is external or can replace one of the other devices in the universal drive bay. The current trend is back to 3-spindle machines for corporate buyers. Many companies have found that users lose the odd device and it must be replaced at high cost. In-fact more innovative designs have reduced the size/weight penalty of 3-spindle machines to the point where there is little to be gained from 2-spindle units.

KEYBOARD – Conventional keyboard layout with standard 19 mm key size, 12-function keys, Arrow keys in conventional star pattern.

RANDOM ACCESS MEMORY (RAM) -- 64 to128 Megabytes and capable of supporting at least 256 MB. Power users now require 128 MB and Windows-2000 will probably make it standard by next year.

CD-ROM DRIVE -- A CD-ROM drive of 20x variable speed or better and capable of reading standard CD-R disks. Check to make sure it is possible to run the CD-ROM and diskette drive at the same time. Some machines don't allow it. As of yet, there is little application for DVD drives but this will change as training videos are converted to DVD.

LS-120 REMOVABLE DATA STORAGE DRIVE – A removable media drive capable of supporting LS-120 120 MB removable cartridges and 1.4 MB diskettes. Computer must be capable of operating LS-120/diskette drive simultaneous with CD-ROM drive. All FMCSA safety specialist machines are equipped with LS-120 drives.

INPUT POINTING DEVICE -- a built-in pointing stick input device located within the keyboard structure and capable of easy cursor travel across the full screen. Digitizer

pad devices are a popular option, but some units are poor. Some digitizer pads, however, can support signature digitizing. It is also common for users to buy external mice or trackballs.

OTHER REQUIRED FEATURES –

1. Universal Serial Ports, (USB),
2. Infrared port (IrDA),
3. 16-bit sound with integrated stereo speakers,
4. On/off switch with protection from inadvertent power-up.
5. Enhanced parallel port
6. Standard serial port
7. External XGA video port
8. External PS/2 keyboard port
9. External mouse port
10. Microphone-in jack
11. Speaker-out jack
12. Line-in jack
13. Visible indicators for, power on, AC line connected, battery charging.
14. Port replicator connection port

MODEM – 56K v.90 internal modem, (PC-card or integrated). A dial-up modem is recommended even if wireless modems are also used.

PORT REPLICATOR / DOCKING STATION – (optional) An external connecting station simplifies connecting laptop into an office LAN system by reducing the number of connections. The port replicator should contain the following connectors: PS/2 serial port, mouse port, enhanced parallel port, USB, external keyboard port, external video, microphone-in, line-in, speaker-out jacks.

NIC CARD – (optional) Network Interface Card for 10/100 mbps Ethernet. Unit is often located in the port replicator. This is a good strategy since there is no need for a NIC in the laptop when detached from the LAN.

OPERATING SYSTEM – Windows98, edition 2, pre-installed and optimized for the specific laptop. Within a few months, Windows-2000 will likely become the laptop standard, but at present lack of drivers is delaying this. Windows-NT (V4.0) is not optimized for laptops, but third parties have added the needed power management and Plug & Play features. FMCSA Field Systems software has not yet been certified to run with Windows-2000. This should come by summer 2000. Check with FSG. Legacy, remotely connected Federal systems will not run on laptops with Windows-NT.

RUGGEDNESS – Several classification systems have been devised to measure this, but most manufacturers don't list them uniformly in their specs. There is a clear trade off between ruggedness and cost, so mil-spec machines are overkill for roadside safety

applications. Generally look for poor design features such as flimsy doors, flexing on the screen display frame and plastic fatigue lines on the case as tips that a given machine may not hold up well. Magnesium alloy cases, spill resistant keyboards, shock-mounted hard drives are good rugged features, but also add costs. Panasonic laptops have captured much of the law enforcement MDT business because of their ruggedness. Unfortunately, one continuing problem with rugged machines is that they lag behind the market in features, screen size, & processing speed.

WARRANTY – Full 3-year parts and labor warranty backed up by a reliable company with good history in the business is critical to successful laptop deployment. The idea is to have the warranty run for the full life cycle of the machines.

Suggested Laptop Computers

The most popular laptops for roadside inspections are the Panasonic Toughbook line. See: www.panasonic.com/computer/notebook/index.htm Most Toughbooks are not quite up to the above specs, but will run the existing applications. Their ruggedness features add about $700 per machine to costs. FMCSA uses Toughbooks for Mexican border inspections.

FMCSA is currently using the Gateway 2500 series laptops for Safety Specialists who are mostly involved in Compliance Reviews. We are about half way through the lifecycle on these machines. The price/performance ratio for the Gateway units has been very favorable. Reliability and customer support has been good. Check: www.gw2k.com

Frequent winner of magazine torture tests, Dell laptops combined ruggedized features with good pricing and easy customization. Check: www.dell.com

There are many other quality Pentium III laptops on the market including models from: IBM, Toshiba, Twinhead, WinBook, Quantex, Sony, Compaq, Fujitsu, Hewlett-Packard, and NEC.

Our experience strongly argues against "white box" private branded laptops even though they can be configured to meet the above specs and are low cost. The ability to have a solid 3-year warranty, customer support, and readily available quick turn around repair center is critical to keeping laptops functional. White box machines, which are generic machines manufactured by one company and sold by another, are low cost because the vendors offer minimum support and repair service.

Suggested Printers & Scanners

Windows software can print reports with almost any Windows supported printer. Portability & power usage in this application may not be critical if the printer says in the car and is powered from the car battery through a 110 volt power inverter.

There is currently little innovation in portable printers and almost no new product introductions. The following have been successfully used for this application:

Mfg & Model #	Sheet feeder	Color	Experience
Canon BJC-80 Bubblejet,	built-in	Yes	Very good, but limited life
Canon BJC-50 Bubblejet	Attachable	Yes	modular unit, similar to BJC-80
HP Deskjet Portable 340,	Attachable	No	Poor sheet feeder, bulky unit
Pentax PocketJet II	No	No	Thermal, very compact, rugged

The HP and Canon units are inkjet printers. Cost of inkjet cartridges has become an issue for some States (between 10 - 17 cents per output page). Ink usage varies from one printer to the next and cartridge use can be high if many copies of each report are printed. For Canon see: www.ccsi.canon.com/goto.shtml?/bjc/index.html For HP see: www.hp.com

The Pentax PocketJet thermal printer is one alternative to Inkjet printers. It allows fast high quality printing on special thermal paper. The paper is the only consumable and is claimed to have a 7 year shelf life. The Pentax unit is remarkably rugged and small at 1.2" x 10" x 2.2". It is gaining popularity for police cruiser installations. Paper cost runs around 7 cents per sheet. Note that the Pentax unit has no sheet feeder so each page has to be fed separately or fed from a special roll feeder. Pentax can be reached at 800 543-6144 or www.pentaxtech.com

Dot matrix printers and small laser printers offer another solution if space is available. The 110-volt units can be powered from the car battery through an inverter. Some States are using light dot matrix printers with NCR paper to get multiple copies. This approach has a very low cost per page. Check the EPSON line of dot matrix printers for a model that fits you budget and space. Contact: www.epson.com. Many states are using small laser printers which can be set up at scale houses or in vans to serve multiple inspectors.

Portable Scanners have proved very useful for copying documents during roadside inspections and Compliance Reviews. The scanner market is dominated by the Visioneer Strobe Pro sheet-fed scanner which has an optical resolution of 300 dpi (dots per inch), 30-bit color depth, and quick single pass scaning. The Visioneer Strobe can scan documents up to 8.5" x 30" yet only weighs 1.3 pounds and is only 2"x2.5"x11". Both USB and serial port versions are available. The USB version requires Windows-98 or 2000.

The “NT” package from Visioneer adds considerable software for an additional $50. Included is PaperPort Deluxe 6.0 (an excellent document management system), TextBridge Pro 8.0) OCR software, MGI PhotoSuite II SE (image management), PictureWorks PhotoEnhancer (image management) and Visioneer’s Web Publisher (image to web).

To date, combined printer & scanner products have not been successful. The Canon Bubblejet add-on is very slow and impractical.

For details on the Visioneer Scanner contact:
www.visioneer.com/products/sheetfed/pro/body.html.

Carrying Cases

– Many options available. Two good candidates are:

Targus Universal Notebook Case (#cun1)	see: www.targus.com
Tenba Computer Traveler (#416)	see: www.tenba.com

Note that government prices on these are considerably below retail. The Targus was last quoted around $50 and the Tenba (a larger case) at just over $100.

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Development, Support & Training

Software Systems Development -- FMCSA has an ongoing field user systems technology development program centered around the Field Systems Group in Lakewood, CO. This document was prepared by the FSG. (303 969-5140), address: 555 Zang St. Room 190, Lakewood, Colorado 80228

Technical Support -- FMCSA fully supports all custom software systems discussed in this document. A staffed technical support center is operational out of Cambridge, MA. Contact: (617) 374-5090 (Mon - Fri 8:00 - 5:00 EST).

Training -- FMCSA periodically hosts custom systems training in different parts of the country. These courses are designed as train-the-trainer hands on sessions. Contract the technical support hotline for scheduling.

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